

# PATENT ABSTRACTS OF JAPAN

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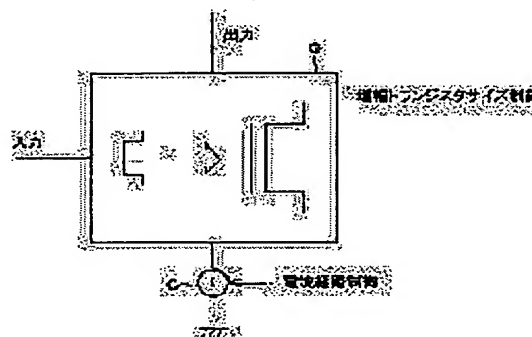
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## (54) VARIABLE GAIN AMPLIFIER

(57)Abstract:

PROBLEM TO BE SOLVED: To realize variable gain amplifier which can make decrement of gain act as increment of IIP3(tertiary input intercept point) and has a small mounting area.

SOLUTION: In a current path control circuit C, a path of a current flowing in an amplifying transistor part Q is controlled, so that the practical scale of a transistor constituting the amplifying transistor part Q is controlled, and gain and IIP3 are controlled. In the case that the value I of a current flowing in a circuit is kept constant by using a current path controlling circuit C, transconductance (gain) is decreased or increased when scale W/L of the transistor is decreased or increased, and IIP3 is increased or decreased.



## LEGAL STATUS

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